



TOWARDS A SEAMLESS MOBILITY SYSTEM

The C-130 and Air Force Reorganization

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*Aerospace power is most effective when it is focused in purpose
and not needlessly dispersed.*

—AFM 1-1, *Basic Aerospace Doctrine of the United States Air Force*, vol. 1, March 1992

A RECENT ISSUE of *Fortune* features an article entitled “Why Companies Fail.” One of the questions it poses is, “Why do successful organizations, which once could do no wrong, suddenly begin to lose their way?” In answering that question, experts emphasize that one of the “key chasms” to avoid is “a tendency on the part of management to diversify into fields far from the organization’s essential core.”¹ While there is no danger of our “company” failing, recent Air Force restructuring included at least one major decision that strays from this sound advice. The transfer in 1993 of C-130s from Air Mobility Com-

mand (AMC) to Air Combat Command (ACC) and the unified commanders is both a loss of a core business for AMC and a diversion into a field far from the “organization’s essential core.” Instead, the business plan for the Air Force reorganization should have left the C-130s close to the “organization’s essential core” (i.e., AMC’s airlift mission) and adjusted an already proven product to the changing environment. It’s time to rethink this issue.

The core restructuring of the post-cold-war Air Force followed a simple binary logic: did forces belong to the “global reach” or “global power” portion of

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According to a time-tested doctrinal principle, airlift is a system consisting of many diverse yet interlocking components that must work well together for the whole to function effectively. Further, it is a seamless system, comprising a continuum of overlapping tasks and responsibilities best performed by a single organization that devotes its energies to thinking about and acting on how best to use airlift forces.

the Air Force vision statement? Forces previously associated with conducting violent aerial warfare were generally considered part of global power and placed in ACC, while airlift and tanker forces that contributed to the maturing mobility strategy of global reach were assigned to AMC. Most major weapon systems were easily and naturally classified and placed. But one weapon system—the C-130—was not.

Although part of Military Airlift Command (MAC) for 18 years and AMC for nearly a year and a half, C-130 aircraft and advocacy for those aircraft transferred to ACC on 1 October 1993. In preliminary reorganizational steps, C-130s became part of an initiative by the chief of staff of the Air Force (CSAF) in February 1991 to form composite air wings; thus, theater-based C-130s overseas returned to the control of theater air force component commanders (AFCC) by June 1992.

The idea to transfer C-130s germinated even before the Persian Gulf War as part of a broader interest in command relationships involving air assets in the war-fighting theaters and the blurred distinction between strategic and tactical missions.² Gen Merrill A. McPeak, then commander in chief (CINC) of Pacific Air Forces, advocated the movement of certain air assets to their respective theater AFCCs in order to consolidate air assets under a single commander. He reasoned that, over the years, the Air Force's organizational structure had moved away from simplicity in command structures and from general reliance on a single controlling authority in theater operations. As

the new CSAF presiding over the massive Air Force reorganization, he included C-130s in the new "composite wings" and secured the transfer of theater C-130s to the AFCCs. Finally, General McPeak directed the transition of C-130 aircraft, advocacy, and weapon-system management from AMC to ACC, the air component of United States Atlantic Command (USACOM), based in the continental United States (CONUS).

Such proposals regarding C-130s were unconvincing to many people in the Department of Defense (DOD), including senior airlift leaders who defended the concept of the single airlift manager and cited such issues as economy and responsiveness of the airlift system. MAC was accused of dragging its heels on reorganization issues and of fighting the age-old battle of determining whether or not the theater commander should own the C-130s.³ In his exit interview, Gen Hansford T. Johnson, former CINCMAC and first commander of AMC, expressed concern over the transfer by saying that "the dispersal of those forces will greatly complicate the AMC and USTRANSCOM [United States Transportation Command] effort and significantly decrease the overall airlift . . . capabilities of our nation. . . . I disagree totally on how we've broken up . . . the airlift. We've set ourselves up to have a catastrophic problem at some point."⁴

Preliminary discussions among senior Air Force leaders involved in the reorganization suggested that some airlift would be owned and operated by the theaters. In any case, early proposals clearly indicated

that advocacy for equipment modernization and training of all airlift forces, both theater and strategic, would carry over to AMC.⁵

The Joint Staff scrutinized the proposed transfer, viewing it as both an expansion of the mission and resources of USACOM and a disruption of the existing common-user airlift system.⁶ The Joint Staff further questioned the precedence of new arrangements over user concerns of supported CINCs who would no longer have a single “belly button” to press when they ordered airlift support. This point made the transfer a clear target for congressional criticism, as was the case with the consolidation and transfer of C-130s from Tactical Air Command (TAC) in 1974. Nevertheless, in a sequence of events concentrating more on the balancing of forces in the new Air Force organizational scheme than the effectiveness of the airlift system, the Air Force overturned the program decision memorandum (PDM) of July 1974 that directed the consolidation of all airlift forces under a single manager.⁷

Framing the Issue

Previously accepted airlift doctrine and operations fundamentally changed with the AMC to ACC, to the unified theater commands, and—on a smaller scale—to the composite wings. Resembling the pre-airlift-consolidation period of 1974 that also favored the C-130 as a theater asset, the transfer rested on changed Air Force views of three central issues: (1) the question of whether airlift is regarded as a seamless system or an apportioned resource, (2) the apparent conflict between the concept of a single airlift manager and the desire for unified command in overseas theaters, and (3) the question of who should be *the voice* for the C-130.

Assuming that the C-130 is a theater asset implies that airlift is a resource to be allocated and parceled out and discounts the single-manager and common-user concepts so central to the consolidation argument. This view further conflicts with a time-tested doctrinal principle that airlift is a system consisting of many diverse yet interlocked components that must work well together if the whole is to function effectively. In other words, airlift should be a seamless system, comprising a “continuum of overlapping tasks and responsibilities”⁸ best performed by a single organization that devotes its energies to thinking about and acting on how best to use airlift forces. Also implicit in the transfer is the notion that the single-manager and consolidated-airlift concepts are deficient and that previous intratheater airlift support fell short of theater CINCs’ expectations and requirements. Lastly, the transfer of advocacy seems to favor ACC’s being a voice for a particular aircraft (the C-130) and location (the theater) rather than for a broad mission categorization (airlift).

In sharp contrast, proponents of consolidated, single-manager airlift argue that the transfer of C-130s away from AMC’s global airlift system is not in the best interest of the airlift and mobility capabilities of the United States and its allies and does not bode well for the long-term viability of the C-130. Substantial past, present, and future evidence convincingly supports a return of the C-130 to the airlift and defense transportation community, where it resided for so long. Now that global and theater airlift are again fragmented, the airlift and mobility communities can only improvise to maintain the advantages of efficiency and mutual support gained through consolidation. A corollary to the belief in the consolidated, single-manager airlift system explains how that system never faltered in its unified theater support. Specifically, airlift forces operated in accordance with the guidance and priorities of the theater commanders and provided a realistic, responsive solution to supervise intratheater and intertheater airlift simultaneously within a unified command’s area of responsibility (AOR).

Historical and Doctrinal Rationale

Consolidation of strategic and theater airlift within a single, global airlift system was the by-product of an evolutionary process that recognized and improved earlier technological and doctrinal shortcomings. The system was conceived during World War II, when the implications of aviation technology became clear. Even though part of the rationale for the current Air Force restructuring is the primacy of a theater commander’s requirements—a belief from World War II—postwar airlift thinkers reached different conclusions.⁹ L. W. Pogue, chairman of the Civil Aeronautics Agency, postulated in 1942 that “within the air transport arena, the speed and mobility of transport airplanes had reduced the entire world to one theater of operation.”¹⁰

Key Army Air Corps leaders were sensitive to the dichotomy between theater and global operations and requirements. Maj Gen Harold L. George, commander of Air Transport Command (ATC), acknowledged that “no tradition in the Army has more universal respect than the tradition which concludes that in [his or her] sphere of responsibility the theater commander shall have basic and, some times, over-riding authority. [However,] the generations which contributed most to the establishment of this tradition were those equipped with infantry, cavalry, and artillery as their principal weapons.” George ventured that the airplane’s coming of age “has broadened the ordinary theater of warfare, has changed very basically our previous conceptions of warfare methods, and must have some effect upon the organizational method of conducting wars.” Further, he observed that

this is the first war in which we have engaged where the "world" defines the theater. . . . Any reasonable analysis of the requirements of [World War II] must readily recognize the necessity for a "many theater" system of air transportation, flexible enough to be mobile and with direction centralized enough to recognize the comparable requirements of many theaters. To permit any theater commander to exercise final judgment upon the employment of all aircraft within [their] theater, irrespective of the requirements of other theaters, is but an endeavor to conduct on a "local" basis a war which has refused to become local.¹¹

In the years following World War II, airlift pioneer Gen William H. Tunner unsuccessfully lobbied the Air Force to unify all air transport organizations and to end the historical distinction between tactical and strategic air transport.¹² Little progress was made until the early 1960s, when ideas developed that were as much conceptual as technological. Previously, constraints on airlift entailed combinations of at least nine factors: speed, range/payload trade-off, flexibility of employment, cubic capacity, load ability, self-sufficiency, terminal base requirements, fuel dependency, and direct operating costs.¹³ With a fleet of multipurpose C-130, C-141, and—eventually—C-5 aircraft available to overcome those technical limitations, thinkers and planners were no longer limited by aircraft capability and could turn their attention to determining how those aircraft could be employed. When the nation's military strategy changed from massive retaliation to flexible response, the speed and responsiveness of air transport took on new importance. The basic function of a modern airlift force would be to help prevent any type of war, if possible, and to help secure a swift conclusion, should deterrence fail. Gen Howell M. Estes, Jr., commander of Military Air Transport Service (MATs), wrote in 1969 of this "airlift without precedent" in his forward-looking article "Modern Combat Airlift": "The role of modern combat airlift, then, is to airlift combat forces and all their battle equipment, in the size and mix required—with the greatest speed—to any point in the world, no matter how remote or primitive, where a threat arises or is likely to erupt."¹⁴

In 1964, TAC and MATs were tasked to prepare new doctrinal manuals for troop-carrier and airlift aviation. A doctrine-development committee in MATs suggested that the timing was right to end the distinction between tactical and strategic airlift: "With the present and future capacity of MATs to perform all phases of the airlift mission, the concept of airlift need no longer be fragmented, but can now become an entity."¹⁵ In a letter to the Air Force that proposed a single-airlift manual, General Estes agreed that a multipurpose airlift force ended the distinction between the two-



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manual approach of assault (tactical) and strategic airlift: "Airlift is an instrument of national and military power in its own right, as well as an essential supporting element to strategic and tactical combat forces. . . . It is my opinion that the full functional capability of airlift must be addressed as an entity in order to exploit the flexibility of airlift forces. Such capability cannot in any way be considered divisible."¹⁶ A claim can be made that by the mid-to-late 1960s, airlift moved into a modern era characterized by movement towards an all-jet fleet with intercontinental capability and an ability to respond without qualification to total airlift requirements.

Two events in the modern era spurred airlift consolidation policy: Operation Nickel Grass, the US airlift to Israel during the Mideast War of 1973, and the airlift experience of the Vietnam War, evaluated by the Project Corona Harvest report on airlift in 1973. The C-130 played a major role in both events.

One must consider Operation Nickel Grass the prototype of the present "global reach" doctrine of power projection, whereby mobility forces offer the national command authorities (NCA) an ability to respond quickly and decisively with a wide range of options to regional crises, anywhere in the world. Nickel Grass



Airlift is the mission. A theater is merely the location where it is accomplished. The C-130, picture here in formation with a C-141, is but "one tool in the toolbox" used for that mission.

demonstrated the ability to project and resupply the substantial forces of modern warfare with an all-jet transport fleet over intercontinental distances.¹⁷

Although deliveries of war materiel to Israel were made exclusively by C-141 and C-5 aircraft, the airlift network constructed for the CONUS-to-Israel transfer included an important role for the C-130. Initially, command relationships and control of C-130s were areas of concern that complicated the anticipated operations because MAC did not have access to the C-130 fleet to move small but critical loads (e.g., materiel-handling equipment, additional aircrews, and airlift control element [ALCE] teams). When the Soviet response to the Mideast War caused the United States to order a heightened military alert, all C-130s were withdrawn from MAC's control because these aircraft were either theater assets under the control of theater CINCs or CONUS-based assets under TAC. MAC was forced to use C-141s to move these small (some only 2,000 pounds) but necessary loads for en route support. These command relationships delayed the use of C-130s until 15 October, when 12 aircraft per day were dedicated to MAC's use, even though initial planning for Nickel Grass began on 6 October.¹⁸ This experience in airlift management, combined with similar findings from the Vietnam War, formed powerful arguments for airlift consolidation.

During the Vietnam War, the Air Force systematically gathered information on air operations to assist in the writing of future doctrine. From 1965 to 1968, a team of officers from the Tactical Airlift Center participated in this effort—Project Corona Harvest—and

completed a lengthy study of various aspects of wartime airlift operations. That team's unanimous recommendation was that "steps be taken to achieve a single airlift command as soon as possible."¹⁹ Their 1973 report concluded that operating two airlift systems (tactical and strategic) led to "extensive parallelism in their basic airlift functions which detracted from efficiency and tended to complicate the mission." Since mission statements of tactical and strategic airlift overlapped, they were vague about responsibilities and areas of command and control (C²). Moreover, both airlift forces were equipped and trained to perform

in a similar manner and thus "engaged in the air movement of personnel and material over long and short distances employing the same tactics and techniques in discharging these duties." The report recommended that a "true single manager concept of operation would provide a more responsive, flexible, effective, and economical airlift force with considerable savings in manpower and equipment." A consolidated force would also standardize a system of operations for all airlift, no matter the location. Clearly, distinguishing two airlift forces by aircraft type proved false. For example, not only had C-130s augmented the strategic mission, but C-141s and newly operational C-5s had flown directly into the combat zone.²⁰

Shortly after Nickel Grass and the release of the final Corona Harvest report, Secretary of Defense James R. Schlesinger directed the Department of Defense (DOD) to merge all tactical airlift forces into one force and consolidate all airlift forces under a single manager. New airlift policy was issued as a program decision memorandum on 29 July 1974 and amended on 22 August 1974. Air Force general George Brown, chairman of the Joint Chiefs of Staff (JCS), elaborated that "while the present (duplicative) command arrangements have worked well in peacetime . . . [the airlift system] will face increased demands in wartime when we can expect competition not only among unified and specified commanders for worldwide resources, but also among conflicting demands *within* a theater" (emphasis added).²¹ The Air Force was told on 29 August 1974 of DOD's decision to centralize almost all airlift (excluding the Navy's) in MAC, which specifically directed that all tactical C-130s and associated support in TAC and the overseas commands be transferred in place to MAC. A joint statement by the CSAF and

secretary of the Air Force explained the meaning of the changes and provided a vision of the consolidated airlift force:

As we have modernized our aircraft over the years, we have realized that the line between tactical and strategic airlift has blurred appreciably. For example, our C-130s have a strategic capability and can be used in this role (as, indeed, they have in the past). Similarly, our C-5s and our C-141s have a tactical capability. . . . The result will be one command responsible for both strategic and tactical airlift roles and for management of resources between them.²²

Post-Vietnam fiscal realities added further credibility to the Corona Harvest report. As is the case today, the US was downsizing a large military establishment. To win public backing, Gen David C. Jones, CSAF, provided the rationale for consolidation during a press conference on 13 December 1974. Along with reductions in personnel and aircraft, he stated that “the Air Force had turned toward a single management concept of operating its [airlift] forces,” with assurances that consolidation would provide an “economical airlift force with considerable savings in manpower and equipment.”²³ Thereafter, airlift consolidation became a part of the reduction plan favored by the American public.

Benefits of a flexible, consolidated airlift system became evident in operations in Grenada (Urgent Fury) and Panama (Just Cause). In both actions, aircraft in the core MAC fleet (C-5s, C-141s, and C-130s) were used interchangeably. For the initial assaults, C-130s departed the CONUS as a strategic resource with national objectives at stake. Later in the operations, they reverted to their more traditional mission of theater resupply. Among their taskings, C-5 and C-141 aircraft flew theater logistical-support sorties. All the while, MAC airlift was under that command’s C² mechanisms but remained adequately responsive to the theater commander’s requirements.

There is one airlift mission—“the delivery of what is needed, where it is needed, and when it is needed.”

Most recently, the massive wartime airlifts of Operations Desert Shield and Desert Storm validated the single-manager concept and again showed the merit of such a system. MAC worked through USTRANSCOM directly with United States Central Command (USCENTCOM) and its AFCC to bring additional theater airlift forces from a variety of locations (CONUS,

Pacific, and Europe) to the Persian Gulf. As a total airlift package, the response took the form of aircraft, aerial port, maintenance, logistics, and cargo handlers—the full range of combatant CINC support. Crews, planners, and C² systems were standardized, with no anomalies in strategic and theater aircraft employment, command relationships, or planning.

The best example of this integrated airlift effort between strategic and theater forces was the establishment of express airlift systems that used dedicated C-141s, which flew time-sensitive cargo daily from the CONUS to the Gulf.²⁴ Arrangements were made for intratheater lift schedules to mesh with the arrival of the express flights so that onward routing of critical items was not delayed in-theater. The system worked as a functional equivalent of commercial overnight delivery systems, with centralized control provided by the MAC C² system. This integration of movement from the CONUS to the far points of the Gulf theater was effectively and efficiently accomplished only through a *system* with a *single manager*.

Airlift forces are a finite, national resource.

Difficulties arose during Desert Shield/Desert Storm mainly when control of airlift forces was decentralized. For example, when MAC changed operational control (CHOP) of approximately 144 C-130s to USCENTCOM for intratheater airlift requirements, the logistical supply channels of US Air Forces, Central Command (CENTAF) were supposed to assume responsibility for supplying the C-130s. Because of delays, however, units resorted to requesting spare parts from their home stations. In response to theater needs, MAC developed and monitored a “watch list” of mission-essential items to ensure effective C-130 theater operations; it also dispatched high-priority mission support kits to Rhein-Main AB, Germany; Dhahran and Riyadh, Saudi Arabia; and Kuwait City.²⁵

A second example of the complications caused by decentralized airlift control was the theater-to-theater transfer of forces and materiel. Desert Storm revealed that high-intensity airlift operations can exceed the ability of a single theater’s staff to handle such large airlift flows. Specifically, in January 1991 at the height of the Gulf War buildup, US Air Forces Europe (USAFE) requested that MAC “schedule all intratheater airlift (both strategic and tactical missions) to take full advantage of both NATO [North Atlantic Treaty Organization] airlift and EUROM [European Command] possessed C-130 aircraft for expeditious movement of DESERT STORM . . . requirements” because of the task saturation of its theater headquarters and capabilities.²⁶

Experience in a wide variety of wars and contingencies molded US airlift and mobility capability and doctrine in the modern era of jet transports and intercontinental flights. Adaptation of a consolidated, single-manager airlift system was part of the evolutionary process and served the country well for almost 19 years. Operations Desert Shield and Desert Storm are the most recent successful “stress tests” of the consolidated, single-manager system. Clearly, the historical record does not support the current transfer. Furthermore, conditions have not changed so radically, even in a restructured post-cold-war military, as to offer compelling reasons for abandoning the consolidated airlift system. Chronicled experience offers several timeless doctrinal principles concerning the way airlift works best.²⁷

- Airlift works best as a “seamless” system to accomplish the mission. It is a continuum of overlapping tasks and capabilities. Aircraft are but one part of a *system* that includes—among other elements—logistics, C², and transportation functions.

- There is one airlift mission—“the delivery of what is needed, where it is needed, and when it is needed,”²⁸ quite possibly in combat. Airlift is the mission. A theater is merely the location where it is accomplished. The C-130 is but “one tool in the toolbox” used for that mission.

- Airlift forces are a finite, *national* resource. The airlift system is designed to provide the NCA a rapid, effective, efficient, yet flexible system to respond globally as well as regionally to support the needs of theater commanders individually and concurrently.

Issues for Today

Just as global power frames ACC’s offering to US airpower, so does global reach express AMC’s contribution. These two segments of the broader Air Force mission imply different purposes, contributions, and concerns for AMC and ACC.

Organize, Train, and Equip for the Mission

These two Air Force major commands (MAJCOM) must organize, train, and equip forces for the unified commands. As a component of USTRANSCOM and as part of the Air Force, AMC has the mission of providing operationally ready mobility forces and expertise as required.²⁹ AMC thus acts as the *principal* voice and expert for the airlift mission. Similarly, ACC speaks as the chief voice for air warfare, focusing first and foremost on its combat mission of fighting with bombs, missiles, and guns. The distinctive contribution of each MAJCOM should be made over broad, core mission categorizations—not by individual weapon systems or theater orientation. Having ACC act as advocate for the C-130, based on aircraft type and nomenclature as a theater asset, creates a false distinction that overrides

ACC’s and AMC’s reason for existence. As General Tunner once said in very similar circumstances, transfer of an airlift mission from AMC to ACC is “the paradox of men trained for one unique military specialty administering equipment designed for another, functionally and philosophically different.”³⁰ The C-130 is a transport, and airlift is its mission.

Airlift and mobility forces are also keenly sensitive to the assertion that peacetime and wartime military organizational arrangements are necessarily interdependent and must balance extensive peacetime transportation requirements with corresponding combat capabilities. AMC fulfills its charter of organizing, training, and equipping airlift forces underneath an umbrella of providing DOD with significant transportation services. Today’s fragmented airlift system—in which airlift and mobility capability is further dispersed among the theaters, composite wings, and ACC—unnecessarily complicates this substantial enterprise.

The Mission

As mentioned earlier, there is a single airlift mission—the delivery of what is needed, where it is needed, and when it is needed. That mission may have to be accomplished in combat and under adverse conditions. All points of organization, doctrine, and resources must be addressed with regard to that mission. Yet, AMC itself, along with USTRANSCOM, now consider their own missions complete when troops and materiel arrive in-theater and are handed off to a separate theater logistics system. This is a watershed break—though not yet fully comprehended as such—from the seamless, consolidated, single-manager airlift system that delivered troops and materiel from “fort to foxhole.”

From a war-fighting perspective, the pretransfer organization of airlift forces provided the total flexibility needed by the NCA to apportion and reapportion forces quickly enough to meet evolving contingencies, regardless of location. Ironically, an early argument against consolidation was that tactical units would lose their tactical orientation and thus be less responsive to theater commanders.³¹ Instead, over the 19 years of consolidation, strategic airlift benefited from the tactical side (and vice versa), and the two combined to form a complete system more responsive to theater and strategic needs than either one was before.

The real operational advantages of that complete system lie in standardized doctrine, training, tactics, C², and procedures for all parts of airlift. Such integration of all theater and intertheater forces in MAC and USTRANSCOM eliminated the delays and disconnects in planning, tasking, and controlling airlift for operations that one experienced in a theater-unique airlift organization. A consolidated, single-manager airlift system enables unified CINCs to have the immediate and responsive support that allows them to take quick advantage of opportunities for synergism between dif-

ferent airlift capabilities. In short, it allows them to transport personnel and materiel to any location, under any condition.

Command Relationships and C

Historically, the idea of consolidated airlift under a single manager such as MATS, MAC, or AMC had the potential to disrupt unified command in overseas theaters. After 1947 the Air Force supported the notion of unified theater command, whereby the AFCC exercised operational control (OPCON) over all air assets in the theater, including bomber, tactical, and airlift support. To employ theater-assigned aircraft as a unified force, the AFCC needed OPCON over those aircraft. But the single manager for airlift (MATS and MAC) also desired OPCON over all airlift resources to ensure efficient global and joint use. Airlift planners considered airlift a national resource, as was strategic airpower, and wanted a command structure similar to Strategic Air Command's. The latter included specified command status and retention of OPCON over its forces, while the AFCC retained tactical control and local direction for certain tasks.³²

The establishment of a theater airlift manager (TAM) structure to supervise theater and strategic airlift employment concurrently within a theater proved a viable solution and was ultimately accepted and applied worldwide. In an overseas theater, the area CINC employed the assigned theater airlift forces through the AFCC's TAM. Under the AFCC, the TAM performed the tasks of planning, organizing, coordinating, directing, and controlling all theater-assigned airlift. More importantly, theater commanders gained access via the TAM to all of the airlift system's resources. As airlift's theater representative, the TAM would then accomplish the task with the most effective and efficient mix of airlift resources available. If the JCS assigned additional airlift to the AFCC during a contingency, the single manager would direct those forces to the theater commander. Should the geographic area prove too large for the AFCC to control operations effectively, additional airlift control centers could be established. Visibility over all resources, direct communications to airlift's numbered air forces, and the general flexibility of a single manager would work for better overall service, while full coordination with the theater's tactical air control system would be maintained. These arrangements matured and developed over the years but remained constant in their purpose of enabling theater AFCCs to focus attention on the prosecution of their primary task—the air campaign.

Prior to the transfer, theater-based C-130s were assigned under operational authority of the theater CINCs (i.e., combatant command [COCOM]) and theater AFCCs (i.e., OPCON); however, CINCMAC exercised service authority to organize, train, and equip the forces. In this case, two different MAJCOMs ex-

ercised authority over theater C-130s (i.e., MAC and USAFE in Europe). CONUS-based C-130s were assigned under the operational authority of USCINTRANS (COCOM) and CINCMAC (OPCON); CINCMAC also exercised service authority in the CONUS.³³ But in both cases, the service authority to organize, train, and equip resided in MAC, an organization primarily concerned with airlift issues and a conduit to fully integrate C-130s into the airlift system.

To make the whole airlift system responsive to theater requirements, the commander of airlift forces (COMALF)—an airlifter working within the TAM concept for the theater AFCC and MAC—integrated airlift forces to support all theater and intertheater airlift needs for the theater CINC. This dual-hat arrangement enabled the CINC to control assigned theater airlift forces and also influenced USCINTRANS control and integration of intertheater airlift. These arrangements for consolidation and theater-airlift management paid off. During Operation Just Cause, theater airlift forces (C-130s) were used in strategic roles, and intertheater forces (C-141s) functioned in tactical roles. Because of the MAC C² system, integration was already a fact, and mission crossovers did not have to be coordinated among different forces and commands or sorted out during execution. Likewise, Operation Desert Shield began with a fully integrated airlift structure; the problems with C² and slowness that plagued Operation Nickel Grass did not recur.

Remarkably, despite the transfer to ACC and the theaters, strong substantive ties to AMC and USTRANSCOM remain in place today. That fact, in and of itself, challenges the logic of the 1993 transfer. Presently, the tanker airlift control center (TACC), an AMC organization at Scott AFB, Illinois, serves as the overall executive agent for airlift, continues to be the central point of contact, and provides support for all assets in the system.³⁴ The TACC provides support for all airlift C-130 missions, including coordinating mission details with the tasked unit, exercising tactical control of missions in progress, and managing maintenance recoveries of "broken" aircraft away from the home station. Its mission support planning office (MSPO) coordinates necessary mission support. Meanwhile, ACC formed the airlift operations center (ALOC), a duplicative organization for C-130s, to serve as the contact for sourcing ACC-owned or -gained C-130s, airlift system elements, and support personnel and equipment for AMC- or theater-directed missions. Concern for an "apparent lack of true command and control integration for the C-130" is evident in one C-130 field commander's comments in a quarterly report to ACC headquarters:

The integration of C-130s into these [geographic] theaters by ACC continues, but all the command and control problems have not been totally "debugged." We still find ourselves dependent on the AMC logistics readiness center for responsive reply to our deployed [aircraft] needs and we normally have to dispatch our own maintenance repair teams from home station to keep stateside missions flowing.³⁵

Presently, evolving command relationships between AMC, ACC, USACOM, and USTRANSCOM are even more convoluted in providing airlift support to the war fighters. Supplying theater CINCs with stateside C-130s involves either ACC's answering USTRANSCOM's request for "pieces" to provide C-130 augmentation forces to support a CINC or supplying USACOM with force packages of C-130s for stand-alone use.³⁶ The recently completed movement of forces to Haiti during Operation Restore Democracy was yet a further variation of this "pieces versus packages" arrangement. Operationally, even though a USACOM force package of C-130s was used for the planned air assault, the TACC remained tightly involved (though unintentionally) and watched as the "initial flight of paratrooper-laden C-130s was recalled and then replaced by a continuous air and sea bridge to Haiti."³⁷ If AMC or USTRANSCOM had possessed those forces and provided full-service, out-sourced transportation capability to the theater, at least one additional layer would have been removed from the sourcing, supporting, and monitoring activities, and much cleaner and clearer lines of C² responsibility would have been established.

The Airlift System

One of the assumptions of the ACC concept of operations (CONOPS) for the C-130 transfer was that the "entire airlift system must continue to be responsive to user's needs." The CONOPS further states that "interoperability within the national airlift system, Army, Navy, Marine, and allied countries is mandatory and essential for successful mission accomplishment."³⁸ Yet, major components of the airlift system's continuum of tasks and responsibilities were fractured in some way by the transfer. One good example of a "break" in the airlift system is the division of combat control assets. Combat control forces play a key role in the airlift system for both intertheater and intratheater operations, particularly during the critical, initial stages of tactical or austere-location operations. Those forces have a greater affinity for C-130 operations rather than AMC global-reach operations because of the C-130's remote-location and airdrop capabilities; indeed, about 80 percent of their taskings are linked to C-130 operations of all types.³⁹ Yet, the agreed division of combat control resources available to AMC and ACC in the transfer was that each command got half. In addition,

AMC was originally programmed to remain the functional manager for all combat control assets, despite the imbalance of workload; only recently was advocacy shifted to United States Special Operations Command (USSOCOM). Other airlift system functions were affected by similar arbitrary decisions.

Another example with like implications is the division of airlift control squadrons (ALCS) and airlift control flights (ALCF).⁴⁰ An ALCS forms the cadre for deployed tanker airlift control elements (TALCE) and is augmented by communications, maintenance, and aerial port assets. TALCEs deploy to establish control, coordinate, and report airlift/tanker operations at a base where normal airlift and tanker control facilities are not established or require both planned and no-notice augmentation. The reorganization stipulated that ACC-assigned ALCS forces would focus on specific theater expertise yet would be tasked to maintain strategic interoperability and do so with only limited resident tanker expertise. ACC forces are expected to be able to operate with AMC forces in the field (as they most assuredly will do), yet their ability to operate in both intratheater and intertheater arenas is hamstrung. Again, AMC retained overall functional management for this airlift specialty.

Additional examples of this fragmentation show that, despite the acknowledgment of natural ties and the mutual support of airlift system resources, assets and responsibility for those assets have been artificially and arbitrarily divided. For instance, aerial port assets are divided along functional lines, with air terminal activities going to AMC and ACC receiving aerial delivery activities. AMC continues to be the functional manager for all aerial port activities, and the TACC manages the validation, sourcing, and tasking of peacetime and contingency requirements for aerial port and aerial delivery requirements. Yet, when requested by the theater commander and when used specifically for theater airlift requirements, these forces may CHOP to the supported theater. Moreover, ACC-designated forces are again tasked to "maintain strategic interoperability" with AMC forces.⁴¹

The logistics, aeromedical evacuation, and theater airlift liaison officer (TALO) programs are similarly affected. As a result, the synergy and efficiency of these assets—which existed because of the efforts of a single manager who directed seamless mobility operations—are now dissipated.

Issues for Tomorrow

Where would a consolidated airlift system fit in the airlift and mobility system of the future? One possible role bears similarity to airlift's role in Operation Nickel Grass. Although the C-130 might not transfer materiel over long distances from onload points to destination, it could easily be a key player in moving smaller but critical loads to establish the "aluminum

bridge,” thus freeing intercontinental, long-range assets for AMC’s employment. In addition, the C-130 could be a key aircraft in deploying mobility assets brought back to the CONUS as a result of cutting back our forces overseas. The C-130 would be the weapon system of choice “to go out and lay down our en route structure and have it ready to use no matter where we are tasked to go”⁴² during periods when the tempo of military operations increases. During such times, specified intratheater mobility organizations and resources are used to expand the fixed infrastructure or establish AMC presence and infrastructure where none exists. This role suits the C-130’s capability to move high-priority loads such as materials handling equipment (MHE), combat control teams, and ALCE teams; further, it takes advantage of the aircraft’s ability to operate in austere conditions.

Technology available before the end of the century will further blur distinctions between what are now considered capabilities of global reach mobility forces and the theater airlift mission of today’s C-130 force. Existing airlift forces already perform various airlift missions that overlap intertheater, intratheater, and combat-delivery modes (the historic rationale for consolidation already understood this relationship). These interchangeable roles will almost certainly continue to evolve. We can also anticipate theater airlift without theater beddown, whereby an aircraft such as the C-17 rotates to the theater to perform theater augmentation. Another option is multiple-mission use of intertheater aircraft, whereby an aircraft flies an intertheater mission, stays in the theater to perform missions, and then flies back to the CONUS on another intertheater mission.

Future C-130s or derivative aircraft will have range, speed, payload, and operating capabilities that will provide increased mobility options to theater commanders and the NCA. If they are air-refuelable—a capability which would give them virtually unlimited range—choices expand even further. Any aircraft flying a long-distance, direct-delivery⁴³ mission to the theater—AMC or otherwise—will need a seamless system with focused C² in order to move smoothly from peace to war and execute a theater CINC’s priorities.

We can also expect reengineering of the Defense Transportation System (DTS).⁴⁴ Many common-user customers of airlift and other parties, such as Congress, will continue to understand the military necessity of certain unique types of aircraft, but tolerance for overhead, layering, and duplication will be at an all-time low. Because traditional roles and missions will remain, the airlift system will have to remain flexibly responsive. The strategic airlift fleet (C-141s, C-5s, and C-17s) is already used for theater and tactical roles, and—under certain circumstances—the C-130 can fly strategic missions. A single airlift system remains the best option, particularly in times of fiscal restraint.

One reengineering idea that will continue to attract attention, thought, and resources in the airlift and mobility communities is total asset visibility (TAV). Simply defined, TAV offers full accountability for transported passengers and materiel from shipment point to final destination. Presently, however, TAV is not fully developed to provide supported and supporting commanders with key information from origin to final destination in-theater.

To correct this deficiency, we need a handoff whereby “an efficient and timely transfer of cargo, passengers . . . and information between strategic and theater elements is key to responsive force projection.”⁴⁵ From the user’s perspective, this exchange must be *seamless*; that is, the responsible procedures, systems, and organizations must be transparent to the ultimate customer and must result in a fort-to-foxhole delivery system. But the reengineering proposed by USTRANSCOM stops short of making it the single organization responsible for delivery to the foxhole. Instead, USTRANSCOM component commands are to operate theater port processes up to and including the point where cargo and passengers delivered via strategic lift meet the supported CINC’s controlled resources (trucks and aircraft).⁴⁶ In order to make this handoff to the theater as seamless as possible, to make TAV workable, and to keep the aircraft under the theater CINC, peacetime “organize, train, and equip” functions and aircraft advocacy should be with the organization that can fully integrate them into a standardized, interoperable transportation system. Right now, that organization is Air Mobility Command.

Final Thoughts

A whole array of ideas that support the value of a consolidated airlift system has not been explored. This article only touches on major themes and provides some evidence and examples of the worth of a consolidated system. It is intended to stimulate more discussion of issues not fully debated when the C-130 transfer occurred. Additionally, histories and memoirs can reveal if other factors shaped the transfer during the Air Force reorganization.

History has demonstrated the viability of the consolidated, single-manager airlift system. MAC’s and AMC’s advocacy for C-130s allowed those aircraft to integrate fully into the airlift system and helped generate a synergism among all airlift forces that built a seamless, globally responsive airlift system. Further, the concept of the theater airlift manager allowed theater commanders to use their theater airlift forces as they saw fit and to integrate the entire spectrum of mobility and airlift support for their theater. The seamless, single-manager airlift system increased US combat capability by providing an integrated, worldwide airlift system with the full range of support capability and the necessary flexibility to meet tactical situations in

any environment. The present format, however, is an invitation for future operational failure at a key juncture.

As dollars for defense become scarcer, we will have fewer chances to buy capability and performance. . . . Airlift will have to depend on the wise employment of existing forces and resources.

Finally, as dollars for defense become scarcer, we will have fewer chances to buy capability and performance. Increasingly, airlift will have to depend on the wise employment of existing forces and resources. The time-tested, consolidated, single-manager, seamless airlift system is the best choice for obtaining maximum performance, effectiveness, and efficiency from this nation's airlift forces.

Notes

1. Kenneth Labich, "Why Companies Fail," *Fortune*, 14 November 1994, 52–53.
2. Gen Merrill A. McPeak, "For the Composite Wing," *Airpower Journal* 4, no. 3 (Fall 1990): 5. In this landmark article on the composite wing, General McPeak openly discusses his concern about command relationships within a theater. For insight into the early dialogue of key Air Force leaders on various constructs for the Air Force reorganization, see Gen John M. Loh, commander, Tactical Air Command, Langley AFB, Virginia, interviews with Grant M. Hales, 3 and 24 October 1991. For information about the philosophical construct of the reorganization, see *Air Force Restructure* (Washington, D.C.: Department of the Air Force, September 1991).
3. History, Air Mobility Command (Provisional), 15 January–31 May 1992, 8–9 (Secret); and History, Military Airlift Command, January–December 1990, 390. (Secret) Information extracted from both histories is unclassified. For MAC's view on reorganization from outside the command, see the Loh interviews.
4. Dr James K. Matthews and Dr Jay H. Smith, "General Hansford T. Johnson, An Oral History" (Scott AFB, Ill.: Office of History, United States Transportation Command, December 1992).
5. Loh interview, 3 October 1991.
6. Edward G. Longacre, "Reorganization of Air Combat Command: 1 June 1992–31 December 1993" (Langley AFB, Va.: Office of History, Air Combat Command, September 1994), 29.
7. Point paper, JCS/J-8, "Transfer of CONUS C-130s to Air Combat Command," 13 May 1993. For pertinent extracts regarding the airlift consolidation PDM of 1974, see Richard I. Wolf, *The United States Air Force: Basic Documents on Roles and Missions* (Washington, D.C.: Office of Air Force History, 1987), 389, 391.
8. Lt Col Charles E. Miller, *Airlift Doctrine* (Maxwell AFB, Ala.: Air University Press, March 1988), 430.
9. "The second reason for changing the combatant commands is that many of our commands operate in theaters, not by function. The paramount consideration is the theater commander's requirements, not an arbitrary functional division of labor. This theater approach is precisely the way we organized in World War II. Thus, the MAJCOM reorganization is another example of a return to basics." *Air Force Restructure*, 6–7.
10. L. W. Pogue, chairman, Civil Aeronautics Agency, memorandum to agency personnel, subject: War Aviation Transport Services, 15 June 1942.
11. Maj Gen H. L. George, commander, Air Transport Command, to commanding general, Army Air Forces, letter, subject: Relationship between the Theaters and the Military Air Transportation Agency, 15 March 1944.
12. Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 2, 1961–1984 (Maxwell AFB, Ala.: Air University Press, December 1989), 626.
13. Miller, 345.
14. Quoted in *ibid.*, 346.
15. Futrell, 626.
16. *Ibid.*
17. See Capt Chris J. Krisinger, "Operation Nickel Grass: Airlift in Support of National Policy," *Airpower Journal* 3, no. 1 (Spring 1989): 16–28.
18. Lt Col Robert Trimble, "Interview with General Paul K. Carlton," *Airlift*, Winter 1984, 17. General Carlton was CINCMAC during the Nickel Grass airlift to Israel.
19. Ray L. Bowers, *Tactical Airlift* (Washington, D.C.: Office of Air Force History, 1983), 650.
20. Jeffery S. Underwood, "Military Airlift Comes of Age: Consolidation of Strategic and Tactical Airlift Forces under the Military Airlift Command, 1974–1977" (Scott AFB, Ill.: Office of History, Military Airlift Command, January 1990), 7. Underwood provides an extensive discussion of the Corona Harvest report and the entire history of issues leading to airlift consolidation.
21. "Proposed Transfer of C-130s from AMC to ACC" (Scott AFB, Ill.: Military Airlift Command, ca. 1991), 2.
22. *Ibid.*, 645.
23. Quoted in Underwood, 10.
24. James A. Winnefeld, *A League of Airmen: U.S. Air Power in the Gulf War* (Santa Monica, Calif.: Rand Project Air Force, 1994), 228–29.
25. Betty R. Kennedy, *Air Mobility En Route Structure: The Historical Perspective, 1941–1991* (Scott AFB, Ill.: Office of History, Air Mobility Command, September 1993), 30. See Kennedy for more extensive discussion of C-130 operations and other problems of airlift integration in the Persian Gulf theater.
26. Point paper, HQ MAC/XPP, "Airlift Relationship if Theaters Own C-130s," 23 January 1991.
27. For more discussion of the historical and doctrinal legacy presently influencing airlift, see Miller, 421–35.

28. Ibid., 429.

29. Air Mobility Command, *Air Mobility: Foundation for Global Reach* (Scott AFB, Ill.: Headquarters Air Mobility Command, March 1993), 3. Although AMC's global reach pronouncements stress an intertheater, strategic mobility theme, the author more traditionally associates air mobility with the broad spectrum of issues known as the "airlift system."

30. Lt Gen William H. Tunner, *Over the Hump* (Washington, D.C.: Office of Air Force History, 1964), 322.

31. Miller, 430.

32. Underwood, 26.

33. Point paper, HQ AMC/XPD, "Active Airlift C-130 Organizational Alignment Issues," 14 May 1993.

34. Message, 041815Z OCT 93, HQ ACC/DOL to the field, 4 October 1993; and briefing slides, Col John J. Murphy, HQ ACC/DOL, to the Airlift Tanker Association Convention, Seattle, Wash., subject: How Goes It: The C-130 One Year after the Transfer, October 1994.

35. Commander, 314th Operations Group, to commander, 314th Airlift Wing, letter, subject: Inputs for Quarterly Letter to ACC/CC, 31 March 1994.

36. This "pieces versus packages" arrangement is the result of an agreement put together by the USACOM operations directorate (J-3) and the USTRANSCOM strategic plans and policy directorate (J-5) on 12 May 1994, whereby ACC would provide USTRANSCOM C-130 augmentation forces (pieces) in support of a CINC who already has C-130s for an ongoing/continuing operation such as the airdrops in Bosnia. In turn, ACC would supply USACOM with force packages of C-130s to deploy in support of a CINC's new operational mission/requirement, stand-alone operation, or discreet mission such as the recently completed food distribution in Somalia.

37. James Kitfield, "The Move to Haiti (Operation Hold Democracy)," *Government Executive*, November 1994, 91.

38. Air Combat Command, "Concept of Operations for C-130 Assets (CONOPS)" (Langley AFB, Va.: HQ ACC/XPJ, 21 December 1993), 6. (Unclassified)

39. Col John Murphy, HQ ACC/DOL, telephone conversation with author, 14 November 1994.

40. Air Combat Command, "Concept of Operations for C-130 Assets (CONOPS)," C-1.

41. Ibid., C-2.

42. Air Mobility Command, *In Support of Global Reach* (Scott AFB, Ill.: Headquarters Air Mobility Command, August 1994), 2-3.

43. The *direct delivery* concept "addresses the most basic airlift requirement: timely delivery of combat forces to a point as close as possible to the battle." Miller, 404. Such an approach moves cargo and troops from a point of embarkation, quite possibly outside the theater, directly to a forward-operating location today served by intratheater airlift forces or surface transportation and bypasses a more conventional, intermediate off-load point. The term is widely used in connection with operations of the new C-17 aircraft.

44. For a futuristic view of defense transportation, see USTRANSCOM Initiatives Team, "Reengineering the Defense Transportation System: The Ought to Be Defense Transportation System for the Year 2010" (Scott AFB, Ill.: USTRANSCOM, January 1994).

45. USTRANSCOM Initiatives Team, "Seamless Handoff," draft of chap. 4 to USTRANSCOM DTS 2010 action plan (Scott AFB, Ill.: USTRANSCOM, January 1994), 4-1.

46. USTRANSCOM Initiatives Team, "Reengineering the Defense Transportation System," 15. This particular section, "Defense Transportation System Relationship to Theater Operations," lays out concepts for the appropriate points where handoffs occur in the theater.

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